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The reference in Note c to Section 1029.8 is to allow for the unique common path of egress travel requirements in spaces with assembly seating, such as in a lecture room or sports facility.

Note d is a reference to the common path of egress travel provisions specific to Group I-2 care rooms and suites that are specifically addressed in Section 407.4.

As indicated in Note e, while Group R-3 and R-4 dwellings are typically only required to have one exit (see Section 1006.3.3, Item 4), there can be a situation where a Group R-3 or R-4 unit is included in a mixed-use building. In these situations, the travel distance limitation of 125 feet for common path of egress travel given in the table is applicable. The total exit access travel distance can be 200 feet (see Table 1017.2). Keep in mind that Section 310.5 limits Group R-4 to 16 residents, excluding staff. This table is specific to an occupant load of 20 or fewer within the unit to allow for a single way out. For Group R-3 and R-4 units where an NFPA 13D sprinkler is permitted, see Section 1006.2.2.6 (per Note g).

Note f is an allowance for the common path of egress travel in an open parking garage to be up to 100 feet (30 480 mm) in length where the occupant load is greater than 30 and there is no sprinkler system provided. This is in recognition of the minimal

possibility of smoke accumulation due to the openness requirements and low fuel loads of open parking garages.

**1006.2.1.1 Three or more exits or exit access doorways.**

Three exits or exit access doorways shall be provided from any space with an occupant load of 501 to 1,000. Four exits or exit access doorways shall be provided from any space with an occupant load greater than 1,000.

❖ Large facilities with high occupant loads are required to have more than two exits leading from each story. This is so that at least one exit will be available in case of a fire emergency and to increase the likelihood that a large number of occupants can be accommodated by the remaining exits where one exit is not available. Section 1005.5 specifies that the loss of one exit must not reduce the available exit capacity by more than 50 percent. This is reiterated in Sections 1029.2 and 1029.3 for spaces with assembly seating for more than 300 occupants. Exits should be separated in accordance with Section 1007.1.2. While an equal distribution of exit capacity among all the exits is not required, a proper design would consider occupant load distribution as well as reasonable capacity distribution so as to avoid a severe dependence on one exit or bottlenecks in anticipated high-use areas.

**TABLE 1006.2.1  
SPACES WITH ONE EXIT OR EXIT ACCESS DOORWAY**

OCCUPANCY	MAXIMUM OCCUPANT LOAD OF SPACE	MAXIMUM COMMON PATH OF EGRESS TRAVEL DISTANCE (feet)		
		Without Sprinkler System (feet)		With Sprinkler System (feet)
		Occupant Load		
		OL ≤ 30	OL > 30	
A <sup>c</sup> , E, M	49	75	75	75 <sup>a</sup>
B	49	100	75	100 <sup>a</sup>
F	49	75	75	100 <sup>a</sup>
H-1, H-2, H-3	3	NP	NP	25 <sup>b</sup>
H-4, H-5	10	NP	NP	75 <sup>b</sup>
I-1, I-2 <sup>d</sup> , I-4	10	NP	NP	75 <sup>a</sup>
I-3	10	NP	NP	100 <sup>a</sup>
R-1	10	NP	NP	75 <sup>a</sup>
R-2	20	NP	NP	125 <sup>a</sup>
R-3 <sup>e</sup>	20	NP	NP	125 <sup>a, g</sup>
R-4 <sup>e</sup>	20	NP	NP	125 <sup>a, g</sup>
S <sup>f</sup>	29	100	75	100 <sup>a</sup>
U	49	100	75	75 <sup>a</sup>

For SI: 1 foot = 304.8 mm.

NP = Not Permitted.

- Buildings equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 or 903.3.1.2. See Section 903 for occupancies where automatic sprinkler systems are permitted in accordance with Section 903.3.1.2.
- Group H occupancies equipped throughout with an automatic sprinkler system in accordance with Section 903.2.5.
- For a room or space used for assembly purposes having fixed seating, see Section 1029.8.
- For the travel distance limitations in Group I-2, see Section 407.4.
- The common path of egress travel distance shall only apply in a Group R-3 occupancy located in a mixed occupancy building.
- The length of common path of egress travel distance in a Group S-2 open parking garage shall be not more than 100 feet.
- For the travel distance limitations in Groups R-3 and R-4 equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.3, see Section 1006.2.2.6.

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features shall be permitted to project into the required width not more than 1½ inches (38 mm) on each side.

**Exception:** Projections are permitted in corridors within Group I-2 Condition 1 in accordance with Section 407.4.3.

- ❖ Handrails are not required along corridors, level aisles, exit passageways and exit corridors; however, if provided, Section 1014.8 would be applicable. Handrails are sometimes provided along the hallways in hospitals or nursing homes to aid the residents. Bumper guards along the walls are not handrails.

Items such as baseboards, chair rails and pilasters are allowed to protrude over the required width of the corridor a maximum of 1½ inches (38 mm); however, Section 1003.3.3 would be applicable for circulation paths where the corridors or aisles are wider than required.

The exception is in recognition of a situation unique to nursing homes (Group I-2, Condition 1). Section 407.4.3 includes allowances for furniture in corridors to address patients needing a place to sit and rest as well as the new style of design that emphasizes the residential aspects of the environment.

**1005.7.3 Protruding objects.** Protruding objects shall comply with the applicable requirements of Section 1003.3.

- ❖ This section is a reminder that requirements for protruding objects are applicable regarding encroachments into a confined path of travel. The difference, however, is that door and other projections are applied to the required minimum width, while protruding object provisions apply to circulation paths where aisles and corridors are wider than required.

## SECTION 1006 NUMBER OF EXITS AND EXIT ACCESS DOORWAYS

**1006.1 General.** The number of *exits* or *exit access doorways* required within the *means of egress* system shall comply with the provisions of Section 1006.2 for spaces, including *mezzanines*, and Section 1006.3 for *stories* or occupied roofs.

- ❖ The criteria in this section to determine the number of ways to leave rooms or spaces (including mezzanines) and stories and occupied roofs are based on an empirical judgment of the associated risks. An occupied roof is a roof that can be used on a daily basis, such as a roof with a patio, pool or restaurant. A roof is not considered occupied if the only persons who typically access the roof are maintenance and service personnel.

**1006.2 Egress from spaces.** Rooms, areas or spaces, including *mezzanines*, within a *story* or *basement* shall be provided with the number of *exits* or access to *exits* in accordance with this section.

- ❖ This section dictates the minimum number of paths of travel an occupant is to have available to avoid a fire incident in the occupied room or space. While provid-

ing multiple egress doorways from every room is unrealistic, a point does exist where alternative egress paths must be provided based on the number of occupants at risk, the distance any one occupant must travel to reach a doorway and the relative hazards associated with the occupancy of the space. Generally, the number of egress doorways required for any room or space coincides with the occupant load threshold criteria set forth for the minimum number of exits required for a story (see Section 1006.3). For the total exit access travel distance for these spaces, see Table 1017.2.

**1006.2.1 Egress based on occupant load and common path of egress travel distance.** Two *exits* or *exit access doorways* from any space shall be provided where the design *occupant load* or the *common path of egress travel* distance exceeds the values listed in Table 1006.2.1. The cumulative *occupant load* from adjacent rooms, areas or spaces shall be determined in accordance with Section 1004.2.

### Exceptions:

1. The number of *exits* from foyers, lobbies, vestibules or similar spaces need not be based on cumulative *occupant loads* for areas discharging through such spaces, but the capacity of the *exits* from such spaces shall be based on applicable cumulative *occupant loads*.
  2. *Care suites* in Group I-2 occupancies complying with Section 407.4.
- ❖ The limiting criteria in Table 1006.2.1 for rooms or spaces permitted to have a single exit access doorway are based on an empirical judgment of the associated risks. For the total exit access travel distance for these space, see Table 1017.2.

If the occupants of a room are required to egress through another room, as permitted in Sections 1004.2 and 1016.2, the occupancies and egress travel distance of the rooms are to be combined to determine if multiple doorways are required from the combined rooms. For example, if a suite of offices shares a common reception area, the entire suite with the reception area must meet both the occupant load and the travel distance criteria. The same logic applies to a space with a mezzanine (see Section 1004.2.2). If the space is just a passage space, such as a vestibule, this is not considered a situation that is a cumulative occupant load (Exception 1).

It should be noted that where two doorways are required, the remoteness requirement of Section 1007.1 is applicable.

The common path of travel is the distance measured from the most remote point in a space to the point in the exit path where the occupant has access to two required exits in separate directions. The distance limitations are applicable to all paths of travel that lead out of a space or building where two exits are required. An illustration of this distance is found in Commentary Figure 1006.2.1. The illustration reflects